

PEST ALERT

Florida Department of Agriculture and Consumer Services, Division of Plant Industry
Charles H. Bronson, Commissioner of Agriculture

A Neotropical Longhorn Beetle (Coleoptera: Cerambycidae) New to the Mainland of Florida

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INTRODUCTION: *Trachyderes (Dendrobias) mandibularis* Dupont, a large and colorful longhorn beetle, has inhabited the lower Florida Keys for many years. Recently, a second population of this species was discovered in the vicinity of Port Manatee on mainland Florida's west coast. The Manatee County discovery follows the 2004 collection of a single specimen of the same species at the Port of Tampa. Although the pest potential of this species seems low, this discovery illustrates dramatically a pathway for the introduction of exotic organisms into the state.

IDENTIFICATION: This is a large, 17mm-32mm, glossy, black or brown and yellow beetle with very long, multi-colored antennae, and large mandibles in the male (Figs. 1-2, 4). It cannot be confused with any other longhorn beetle in Florida.

BIOLOGY: This species is reported (Linsley 1962) to breed in dead, dry branches of various hardwood trees, including *Citrus*, *Parkinsonia*, and *Salix*. Of the more than 50 Florida Keys specimens in the FSCA, more than half were collected on the spathes of traveller's palms, *Ravenala madagascariensis* Sonn. in October and November. Other records are: Key lime, *Citrus x aurantiifolia* (Christm.) Swingle; Surinam cherry, *Eugenia uniflora* L.; and common fig, *Ficus carica* L. Non-plant records include blacklight trap, flight intercept trap, and McPhail trap. The six Manatee County specimens were all collected at a wounded *Viburnum obovatum* Walt. (Fig. 3) The adults are active during the day.

The collector of most of the specimens supplied these field notes: "The tree is oozing fizzy sap, attracting insects; butterflies, ants, wasps and *Trachyderes* beetles. Five more beetles collected including a mating pair. They are only found on the single damaged tree. They seem to be traveling from somewhere in the area to this tree, nothing within 50 yards has any evidence of damage or beetle population. Heavy wooded areas are surrounding the nursery and relatively inaccessible to scout for any other damaged/native trees" (Pippenger, personal communication).

DISTRIBUTION: *Trachyderes mandibularis* occurs from southern California east to southern Texas, south to the Yucatan Peninsula in the east and Baja California in the west, with an outlying population in the lower Florida Keys. It is quite variable in coloration throughout its extensive range and a number of names have been applied to the various color forms. Huedepohl (1985) synonymized all of these, but later (Huedepohl 1987) resurrected two of them, *T. m. virens* (Casey), from the Lower Rio Grande River Valley in Texas, and *T. m. reductus* (Casey), from Baja California to Arizona, based on color pattern and mandible size.

The mainland Mexico population, *T. m. mandibularis*, varies somewhat in coloration, but generally is reddish-black in ground color, with elytral maculae that do not reach the margins, and non-annulate third antennal segment. The population in the Yucatan Peninsula (states of Yucatan and Quintana Roo) are the palest of all, with a reddish brown ground color, and is a very good match to the lower Keys population, which is remarkably consistent in coloration. This is not surprising as the Yucatan Peninsula is the closest part of Mexico to the Keys. Whether the Keys population is fairly recently established, either as the inadvertent result of human activities or a natural dispersal event, or is relatively old, cannot be determined. The oldest records in the FSCA date back to the early 1930s, although that population was not reported in the literature until years later (Peck and Thomas 1998). Specific island records are Key West, Stock Island, and Fleming Key.

Thus far, all of the specimens collected on Florida's west coast are completely black in ground color and do not appear to belong to the Keys population. In color pattern they resemble the mainland Mexico population, or possibly the Texas population. In either case, it seems clear that the Manatee County population is the result of a separate introduction.

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Fig. 1. *Trachyderes mandibularis*, male.
Photo credit: Shane Hill, UF



Fig. 2. *Trachyderes mandibularis*, female.
Photo credit: Shane Hill, UF



Fig. 3. *Trachyderes mandibularis*, mating pair on wounded *Viburnum obovatum*.
Photo credit: Karen L. Pippenger, FDACS/DPI



Fig. 4. *Trachyderes mandibularis*, live male.
Photo credit: Eugenio Nearn, UF